

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number  
**WO 2005/069065 A1**

(51) International Patent Classification?: **G02F 1/1335,**  
G02B 5/02

c/o Philips Japan, Ltd., Philips Bldg., 2-13-37, Kohnan,  
Minato-ku, Tokyo 108-8507 (JP).

(21) International Application Number:  
PCT/IB2004/052920

(74) Agents: TSUGARU, Susumu et al.; c/o Philips Japan,  
Ltd., Philips Bldg., 2-13-37, Kohnan, Minato-ku, Tokyo  
108-8507 (JP).

(22) International Filing Date:  
24 December 2004 (24.12.2004)

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PCT/IB2004/000067  
5 January 2004 (05.01.2004) IB

(71) Applicant (*for all designated States except US*): KONIN-  
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];  
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

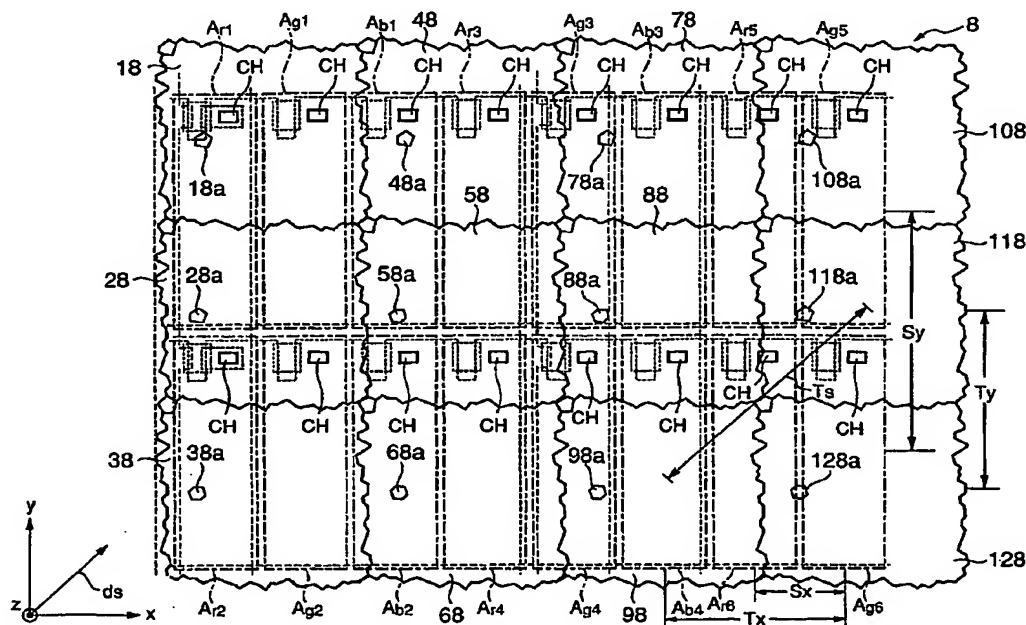
(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): SUMI, Naoki [JP/JP];

[Continued on next page]

(54) Title: A REFLECTIVE STRUCTURE AND AN IMAGE DISPLAY DEVICE



(57) Abstract: A reflective electrode substrate (1) comprises a supporting member having a plurality of first fundamental surfaces (Sf) each having portions (K1, K2) differing in their height, a plurality of undulating portions (18 to 128) formed on the supporting member arranged in the x direction at a undulating portion pitch (Tx) and a plurality of reflective electrodes (Er1,..., Eg6). The plurality of fundamental surfaces (Sf) are arranged in the x direction at the pixel pitch (Sx) and the undulating portion pitch (Tx) is a non-integral multiple of the pixel pitch (Sx).

WO 2005/069065 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*